Brain Injury

Geoffrey Lauer, MA Executive Director

Natasha Retz, BS, CBIS
Director of Programs and Services
Brain Injury Alliance of Iowa



"Creating a better future through brain injury prevention, education, research and advocacy."

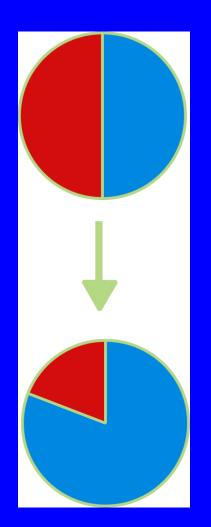
What has happened to make Brain Injury such a big deal?

30 years ago -

50% of persons with a brain injury died as a result of the injury.

Today –

22% die as a result of injury.



What has happened to make Brain Injury such a big deal?

IN SPORTS

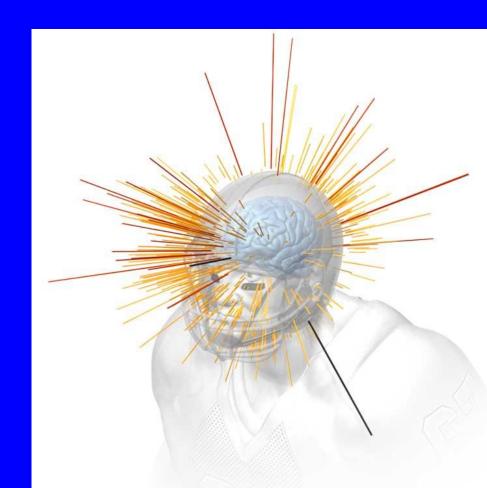
- Increasing awareness and incidence
 - Number of high profile athletes over the past 20 years
 - Steve Young, Troy Aikman, Eric Lindros, Junior Seau
 - 4,200 retired players suing NFL
 - lowa's youth sports and concussion law.
 - Bigger and faster kids, increased opportunities





Proliferation of Sports Concussion Research

- Increased deployment of accelerometers
- Better correlation of concussive impact with negative outcomes





A significant increase in brain injury was anticipated by the US Military in the early 1990's following the liberation of Kuwait.



IED's, body armor

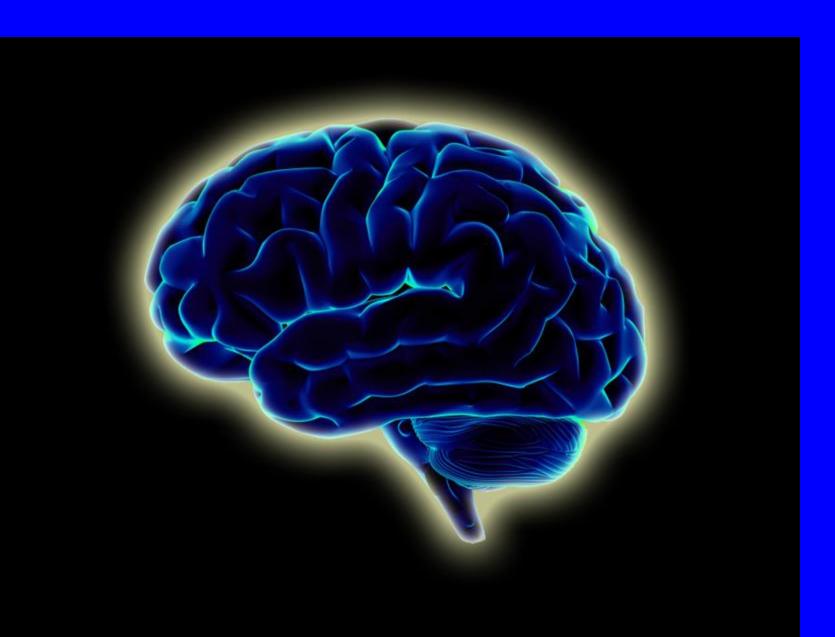


Recent Incidence of brain injury in Military

•15% - 23% of service members return with brain injury



Your Brain



This is your brain





































What is brain injury?

Brain injury is often defined as either a

Traumatic Brain Injury (TBI)

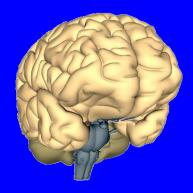
OR

Acquired Brain Injury (ABI)



Traumatic Brain Injury

Traumatic Brain Injury (TBI) is an insult to the brain caused by an external force that may produce a diminished or altered state of consciousness.



Causes of TBI can include falls, motor vehicle crashes, sports injuries, assaults, blast injuries.



Acquired Brain Injury

Acquired Brain Injury (ABI) is an injury to the brain which is not hereditary, congenital or degenerative and has occurred after birth.

Causes of ABI include anoxia, aneurysms, infections to the brain, stroke, brain tumors.





IAC 441--83.81(249A) - 01/2013 "Brain injury" means clinically evident damage to the brain resulting directly or indirectly from trauma, infection, anoxia, vascular lesions or tumor of the brain, not primarily related to degenerative or aging processes, which temporarily or permanently impairs a person's physical, cognitive, or behavioral functions. The person must have a diagnosis from the following list:

"The Silent Epidemic"

More than

5.3 million Americans

live with a disability as a result of traumatic brain injury.





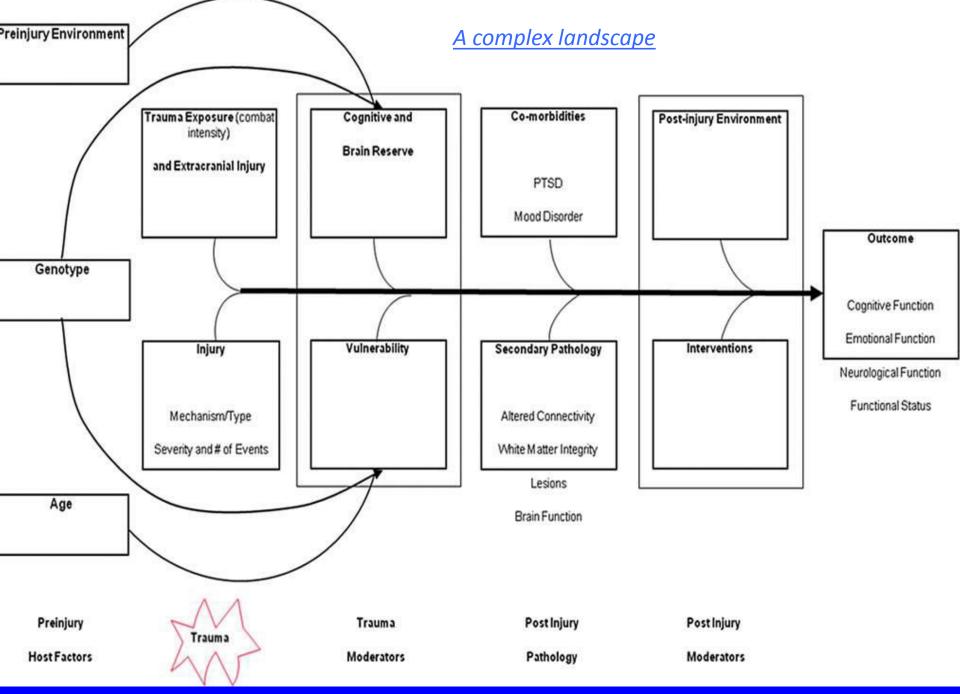
- 2,500 Hospitalized
- 95,000 living with *LONG TERM* disability from *brain injury*
- Falls and Motor Vehicles primary causes
- Increasing survival!



Homelessness and Brain Injury

- The rate of TBI is higher among persons who are homeless as compared to the general population. (8 – 53%)
- Education of caregivers of persons who are at risk of becoming, or are homeless, should involve training on brain injury.
- Screening of individuals who are homeless and linking them to available services is a step in supporting this population





Post Injury Environment

 Lack of information, services, and support can lead to incarceration, mental health issues, homelessness, divorce, substance abuse and unemployment.

 Premature effort to return to old "normal" can lead to secondary conditions.

Common Consequences of Brain Injury

Memory



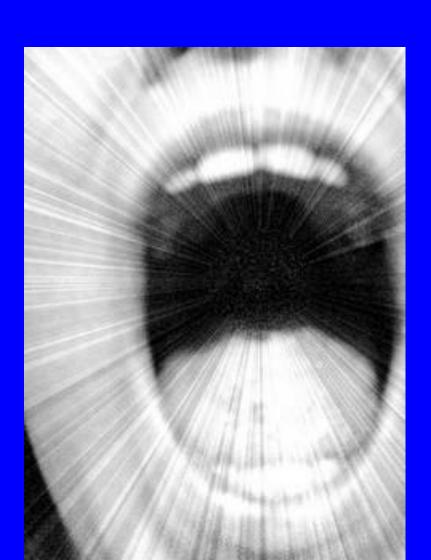
Common Consequences of Brain Injury

Movement, Balance and Mobility



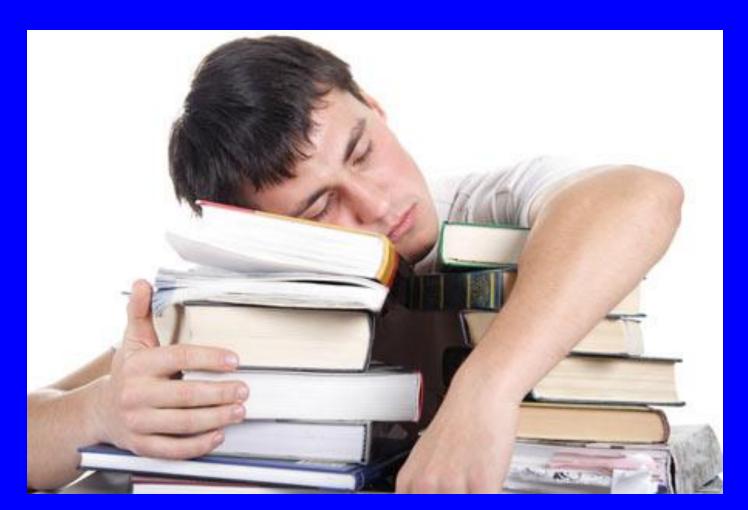
Consequences of Brain Injury

Mood



Consequences of Brain Injury

Learning / Fatigue



Severity of Injury

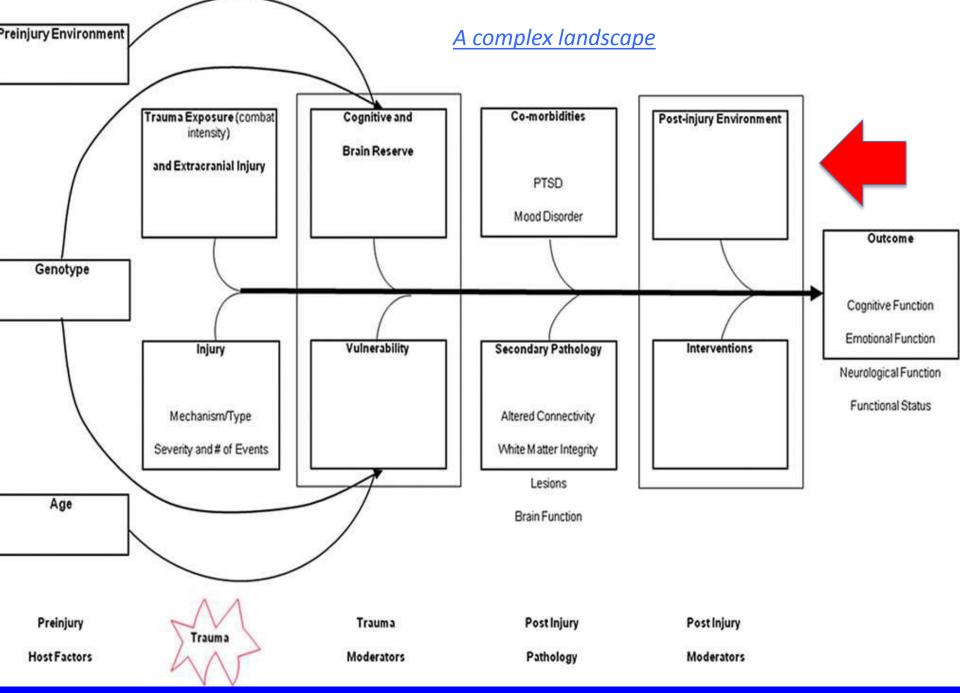
Severity of injury does not guarantee outcome.

Persons who sustain a mild brain injury may have ongoing difficulties for years to come and persons with a severe brain injury may make marked improvements over time.



Every brain injury is unique.





Brain Injury & Families

Just as each brain injury is unique, brain injury will affect each family differently.



Brain injury often changes the roles and responsibilities of family members. The change can be so drastic it can be similar to bringing a stranger home from the hospital.



Consequences of Brain Injury

TBI can cause a wide range of functional short- or long-term changes:

- Thinking (i.e., memory and reasoning)
- Sensation (i.e., touch, taste, and smell)
- Language (i.e., communication, expression, and understanding)
- •Emotion (i.e., depression, anxiety, personality changes, aggression, acting out, and social inappropriateness)
- Physical Changes

Consequences of Brain Injury

- Depression and other Mental Health issues
- Substance Abuse
- Unemployment
- Homelessness
- Incarceration
- Divorce
- Loneliness



Screening

- Clinical screening for brain injury is critical.
- In 2005 a IDPH supported screening of CMH participants in Iowa City showed 57% screening positive for brain injury.
- Screening can lead to a better understanding for treatment trajectory as well as patient information and support.

HELPS BRAIN INIURY SCREENING TOOL Consumer Information: Agency/ Screener's Information: _____ **H** Have you ever **H**it your **H**ead or been **H**it on the **H**ead? Note: Prompt client to think about all incidents that may have occurred at any age, even those that did not seem serious: vehicle accidents, falls, assault, abuse, sports, etc. Screen for domestic violence and child abuse, and also for service related injuries. A TBI can also occur from violent shaking of the head, such as being shaken as a baby or child. E Were you ever seen in the Emergency room, hospital, or by a doctor because of an injury to your Yes No. head? Note: Many people are seen for treatment. However, there are those who cannot afford treatment, or who do not think they require medical attention. L Did you ever Lose consciousness or experience a period of being dazed and confused because of Yes No. an injury to your head? Note: People with TBI may not lose consciousness but experience an "alteration of consciousness." This may include feeling dazed, confused, or disoriented at the time of the injury, or being unable to remember the events surrounding the injury. Do you experience any of these **P**roblems in your daily life since you hit your head? \square Yes \square No Note: Ask your client if s/he experiences any of the following problems, and ask when the problem presented. You are looking for a combination of two or more problems that were not present prior to the injury. headaches difficulty reading, writing, calculating poor problem solving dizziness anxiety difficulty performing your job/school work depression change in relationships with others difficulty concentrating poor judgment (being fired from job, arrests, difficulty remembering fights) Yes No S Any significant Sicknesses? Note: Traumatic brain injury implies a physical blow to the head, but acquired brain injury may also be caused by medical conditions, such as: brain tumor, meningitis, West Nile virus, stroke, seizures. Also screen for instances of oxygen deprivation such as following a heart attack, carbon monoxide poisoning, near drowning, or near suffocation.

Scoring the HELPS Screening Tool

A HELPS screening is considered positive for a possible TBI when the following 3 items are identified:

- 1.) An event that could have caused a brain injury (yes to H, E or S), and
- 2.) A period of loss of consciousness or altered consciousness after the injury or another indication that the injury was severe (yes to L or E), and
- 3.) The presence of two or more chronic problems listed under P that were not present before the injury.

Note:

- A positive screening is **not sufficient to diagnose TBI** as the reason for current symptoms and difficulties other possible causes may need to be ruled out
- Some individuals could present exceptions to the screening results, such as people who do have

Brain Injury Alliance of Iowa

Founded in 1981 by family members and friends of persons with brain injury, the Brain Injury Alliance of Iowa is a statewide membership organization dedicated to providing education, outreach, prevention, advocacy and support services to all persons affected by brain injury and to the general public.



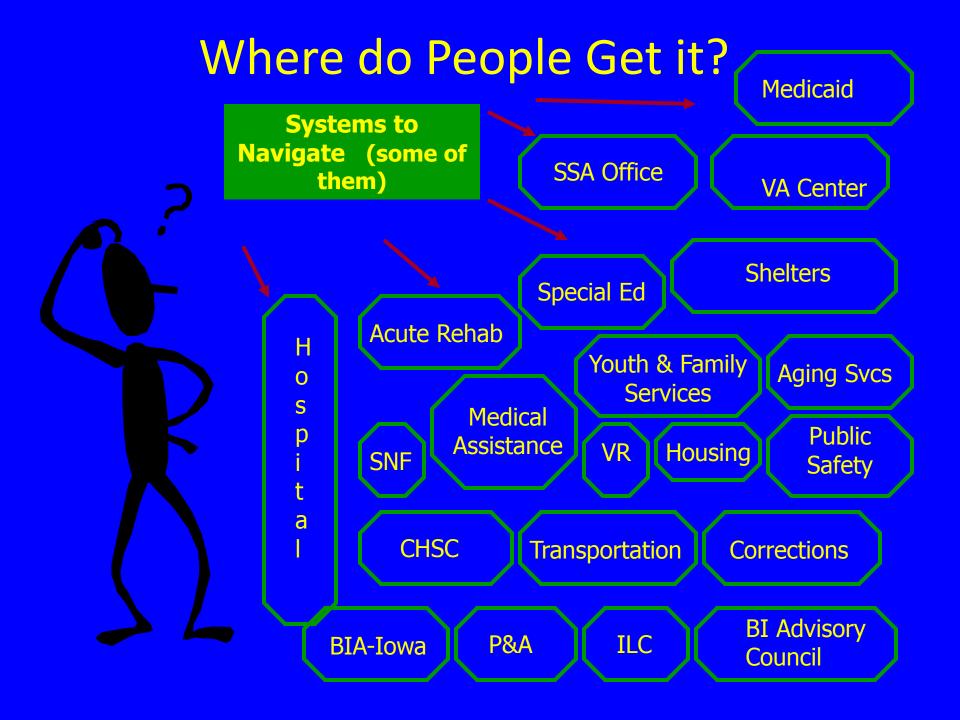
What the Brain Injury Alliance does:

- Programs and Services
- Education
- Research
- Advocacy
- Policy and Legislative Initiatives
- Disability Leadership in Iowa
- Prevention
- Else

Neuro-Resources Facilitation What do people need?

- Assessment/Evaluation
- Behavioral Services
- Community/Family Education
- Companion Services
- Durable Medical Equipment
- Emotional Support
- Financial Assistance
- Housing
- Individual/Family Counseling
- Legal Advice
- Life Skills Training

- Long-term Residential
- Personal Care
- Recreation/Socialization
- Respite
- Special Education
- Supported Employment
- Substance Abuse Treatment
- Rehabilitative Therapies
- Transportation
- Vocational Services



Resource facilitation

 Resource facilitation is a partnership that helps individuals and communities <u>choose</u>, <u>get</u> and <u>keep</u> information, services and supports to make informed choices and meet their goals.

Info & Resources

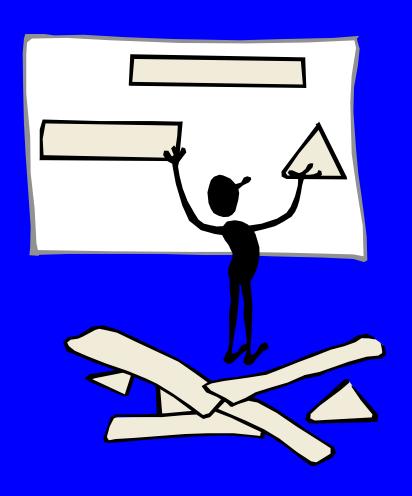
Resource Facilitation

Case Management

How Does NRF Work?

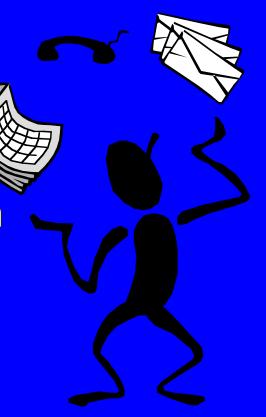
NRF Activities

- Assessment
- Planning
- Identification
- Negotiation
- Monitoring
- Reassessment
- Outreach
- Education & Training



Connecting to NRF

- Toll free number (855-444-6443)
- Local calls
- Links from BIA-lowa
- Direct e-mails (usually from referrals)
- Connections at presentations or meetings
- Walk-ins
- Registry



What the Brain Injury Alliance does:

- Programs and Services
- Education
- Research
- Advocacy
- Policy and Legislative Initiatives
- Disability Leadership in Iowa
- Prevention
- Else

For more information

BIA-lowa 855-444-6443 www.biaia.org